

AMENDMENTS TO THE CLAIMS

1. (Original) A method of transmitting power control information to a BSC (Base Station Controller) in a BTS (Base station Transceiver System) of a mobile communication system, comprising the steps of:

receiving forward power control (FPC) mode information indicating a slow power control from the BSC and transmitting the FPC mode information to an MS (Mobile Station);

extracting an EIB (Erasure Indicator Bit) that is a power control command in a frame period from a reverse pilot channel received from the MS according to the FPC mode information;

determining the status of the EIB; and

transmitting a reverse SCH (Supplemental Channel) message including the EIB status information to the BSC.

2. (Original) The method of claim 1, further comprising the steps of determining a threshold for a forward SCH (Supplemental Channel) power control based on the EIB status included in the reverse SCH message in the BSC.

3. (Original) The method of claim 1, wherein the EIB status is determined using eight odd-numbered PCBs (Power Control Bits) in a PCG (Power Control Group) of the reverse pilot channel.

4. (Original) A method of transmitting a signal to a BSC (Base Station Controller) in a BTS (Base Station Transceiver System) of a mobile communication system, comprising the steps of:

checking a forward power control mode (FPC_MODE);

receiving an EIB (Erasure Indicator Bit) on a reverse pilot channel from an MS (Mobile Station) when the forward power control mode indicates a slow power control; and

transmitting a reverse SCH (Supplemental Channel) message including the received EIB to the BSC.

5. (Original) The method of claim 4, further comprising the step of performing a fast power control on a forward SCH based on a plurality of PCBs (Power Control Bits) received for one frame period on the reverse pilot channel from the MS if the forward power control mode indicates a fast power control.

6. (Currently Amended) A method of transmitting power control information to a BTS (Base Station Transceiver System) in a BSC (Base Station Controller) of a mobile communication system, comprising the steps of:

receiving a reverse SCH (Supplemental Channel) frame and a reverse SCH message including power control information from the BTS;

extracting an EIB (Erasure Indicator Bit) that is a power control command in a frame period from the reverse SCH message;

determining a forward power control threshold based on the EIB; and

extracting information about the quality of a reverse SCH frame from the reverse SCH message; and

changing a reverse power control threshold in a forward SCH(Supplemental Channel) message directed to the BTS based on the extracted quality information when reverse power control information should be adjusted; and

transmitting a forward SCH message including the threshold to the BTS.

7. (Cancelled)

8. (Original) A method of controlling the power of forward channels transmitted from a BTS (Base Station Transceiver System) to an MS (Mobile Station) in a mobile communication system, comprising the steps of:

determining power control rates for a forward FCH (Fundamental Channel)/DCCH (Dedicated Control Channel) and a forward SCH (Supplemental Channel);

performing a fast power control on the FCH(Fundamental Channel)/DCCH at the determined power control rate according to a plurality of power control commands received for one frame period from the MS; and

performing a slow power control on the SCH at the determined power control rate according to a power control command received for one frame period from the MS.

9. (Original) The method of claim 8, wherein a forward power control threshold is changed according to the power control command received for one frame period in the slow power control.

10. (Original) The method of claim 8, wherein the transmission power of the SCH is increased or decreased by a predetermined power value according to the plurality of power control commands received for one frame period in the fast power control.

11. (Original) A method of controlling the power of forward channels transmitted from a BTS (Base Station Transceiver System) to an MS (Mobile Station) in a mobile communication system, comprising the steps of:

determining power control rates for a forward FCH(Fundamental Channel)/DCCH (Dedicated Control Channel) and a forward SCH (Supplemental Channel);

performing a slow power control on the FCH/DCCH at the determined power control rate according to a power control command received for one frame period from the MS; and

performing a fast power control on the SCH at the determined power control rate according to a plurality of power control commands received for one frame period from the MS.

12. (Original) The method of claim 11, wherein a forward power control threshold is changed according to the power control command received for one frame period in the slow power control.

13. (Original) A method of transmitting power control information to a BSC (Base Station Controller) in a BTS (Base station Transceiver System) of a mobile communication

system, comprising the steps of:

- detecting a discontinuous transmission (DTX) period by measuring the energy of a supplemental channel (SCH) frame received from a mobile station (MS);
- checking a forward power control mode (FPC_MODE) if the DTX period is detected;
- extracting a power control command from a reverse pilot channel according to the forward power control mode;
- performing a fast power control on a forward SCH according to a power control bit (PCB) if the power control command is the PCB; and
- transmitting a reverse SCH message including an erasure indicator bit (EIB) status value to the BSC if the power control command is an EIB.